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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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06/19/2001

Richard Folio

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11/01/2005

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EXAMINER

NATNAEL, PAULOS M

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,897

Applicant(s)

FOLIO, RICHARD

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12, 14, 15, 17-19 and 31-37 is/are allowed.
- 6) ☒ Claim(s) 20, 25-30, 38 and 40 is/are rejected.
- 7) ☒ Claim(s) 21-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The Final Rejection of July 15, 2005 is hereby withdrawn, because of the newly found references as applied below. Examiner regrets the inconvenience this might cause the Applicant.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **20,25-30** are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al., U.S. 6,295,093.

Considering claims **20** and **27**, Park et al. (herein after, "Park") discloses closed-captioned broadcasting and receiving method and apparatus thereof suitable for syllable characters. Park teaches in Figures 1 and 2 that the encoded caption data is received by the caption decoding block of receiver circuit of Fig. 2 which decodes the caption and extracts the content data in the data extractor 210, processes the caption in section 230, and finally the data is mixed at mixer 150 for display. In particular, Park teaches, "In order to transmit caption data, one of 10th to 20th lines of vertical blanking

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intervals, and 21st, 262nd, and 525th lines in active video periods may be used.

Also, more than one line may be used for increasing the data transmission rate or for other purposes.” (see col. 6, lines 31-35) [emphasis added] This meets the claimed information is limited to fit only with the top and or bottom video.

As to the claimed “substituting luminance information with a modulated frame of content data”, it is inherent because the caption data is inserted in the active video line, and therefore it would have to substitute either the luminance or other information of the video signal, in order to insert the desired data, the caption data.

Regarding claims **25, 26, 29, and 30**, Park discloses an NTSC encoding, transmission and reception method and apparatus, meeting the claimed subject matter of both claims.

As to the claim **28**, Park discloses, “...since the error correction capability of data is increased, the receiving sensitivity of the caption broadcasting signal can be improved even in the mountainous districts.” (col. 19, lines 28-38)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

5. Claim **38** and **40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. U.S. 6,295,093.

Considering claim **38**, Park et al. (herein after, "Park") discloses closed-captioned broadcasting and receiving method and apparatus thereof suitable for syllable characters. Park teaches in Figures 1 and 2 that the system the encoded caption data is received by the caption decoding block which decodes the caption and extracts the data in the data extractor 210, processes the caption in section 230, and finally the data is mixed at mixer 150 for display. In particular, Park teaches, "In order to transmit caption data, one of 10th to 20th lines of vertical blanking intervals, **and 21st, 262nd, and 525th lines in active video periods may be used.** Also, more than one line may be used for increasing the data transmission rate or for other purposes." (see col. 6, lines 31-35) [emphasis added]

As to the claimed "substituting luminance information with a modulated frame of content data", it is inherently present because the caption data is inserted in the active video line, and therefore it would have to substitute either the luminance or other information of the video signal.

Regarding the claimed "restoring a DC bias level for any content data, the examiner takes official notice in that it is notoriously well known in the television art to use a clamping circuit, for example, in order to restore DC component of a television signal after the signal is subjected to various stages of processing in the TV receiver, since the DC level of a video signal is used to represent the brightness of a reproduced

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video picture and correction, and as a reference level for detecting the sync pulses.

Therefore, it would have been obvious to those with ordinary skill in the television art to modify and/or implement the system of Park so that the television signal is correctly restored, using a clamping or other method.

Regarding claim **40**, Park does not specifically disclose a bit or frame synchronization circuit to remove noise. However, examiner takes an official notice in that such circuits - such as signal conditioners and bit synchronizers -- are notoriously well known in the art that are used to remove noise and produce synchronized binary bit streams at the output, and it would have been obvious to the skilled in the art at the time the invention was made to modify the system Park by providing the well known circuit in order to remove such transmission artifacts from the television signal and output a more stable video signal.

Allowable Subject Matter


6. Claims **1-12,14-15,17-19**, and **31-37** are allowable over the prior art.
7. Claims **21-23** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paulos M. Natnael
Primary Examiner
Art Unit 2614

PMN
October 29, 2005